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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,852	06/02/2000	ANTOON JOHANNES GERARDUS VAN ROSSUM	05032.86955	8871
7590	01/12/2004		EXAMINER KORNAKOV, MICHAIL	
BANNER & WITCOFF 28 STATE STREET 28TH FLOOR BOSTON, MA 02109			ART UNIT 1746	PAPER NUMBER

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	ANTOON JOHANNES GERARDU VAN ROSSUM	
09/508,852	Examiner	Art Unit
	Michael Kornakov	1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 25 November 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

4) Claim(s) 30-33,36 and 39-48 is/are pending in the application.

4a) Of the above claim(s) 30-33,36 and 39-45 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 46-48 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Disposition of Claims

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) The translation of the foreign language provisional application has been received.
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) Interview Summary (PTO-413) Paper No(s) _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____

DETAILED ACTION

Response to Amendment

1. Applicants' request for reconsideration of the finality of the rejection of the last Office Action is persuasive and, therefore, the finality of that action is withdrawn.
2. Amendment, filed November 25, 2003 has been entered.
3. Claims 30-33, 36, 39-48 are currently pending.
4. Claims 30-33, 36, 39-45 have been amended in such a manner that they are now directed to a greenhouse, while the claims presented in Amendment of 08/06/2003 were directed to a protective coating, which is an invention that is independent or distinct from the invention originally claimed for the following reasons: If initially presented the claims directed to a protective coating and the claims directed to a greenhouse, that comprises a substantially transparent surface and a protective coating, would have been restricted on the basis of intermediate-final relationship, wherein distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as acrylic rubber, a pressure-sensitive adhesive, an alkali-soluble injection molding or water ink and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be

obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Examiner specifically would like to address the point from Applicants arguments, that the issue of a greenhouse was addressed in a previous claim 49. This is not found persuasive because previously presented claim 49 called for a method for forming a protective coating, wherein the patentability is defined by novelty and nonobviousness of the method steps, while the instantly presented claims call for a greenhouse, which comprises a binder even not necessarily made by the previously presented process. It is further noted that currently presented claims 30-33, 36, 39-45 would have been classified in the other class and subclass compare to initially presented coating claims.

Since applicants have received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 30-33, 36, 39-45 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

5. It is noted that Claims 46-48 have been amended to introduce the limitation of an intended use of the claimed method.

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 46-48 stand rejected under 35 U.S.C. 102(b) as being anticipated by EP'498.

EP'498 discloses an alkali soluble film, (coating) comprising an acrylic polymer as a binder, which acrylic polymer is obtained by bulk polymerization and has a number average molecular weight 1,000-1,000,000 and Mw/Mn ratio of less than 5. A glass transition temperature of the binder is -80 C or higher (see abstract)

Table 2 on pages 19 and 20 provides the compositions of a binder and its characteristics. It is seen that the binder includes the monomers as instantly claimed and that the characteristics of a binder, such as weight average molecular weight, polydispersity and glass transition temperature are clearly within the claimed range. Especially anticipating is a preferred embodiment, used for an alkyl soluble film (page 6, lines 12-35) wherein cited a polymer based on acrylic acid in a proportion from 50-100% by weight in its structure and having the acid value of 65 mg/g or higher, a number average molecular weight within the range of 1,000 - 50,000, a glass transition temperature of 0° C and a molecular weight distribution (polydispersity) of 4 or less. This clearly anticipates the make-up and characteristics of a binder polymer.

As for the acid value number, a broad teaching of EP'498 is that the acid value higher than 65 mg/g, and there are several specific examples, such as example 2-14 and 2-15 presented in table 2-5 on page 42, which cite the acid values of 150mg/g, which is a specific point within the claimed range. The acrylic polymer of EP'496 when used in compositions for coatings employs different additives, such as reinforcing agents, fillers, antioxidants, plasticizers, lubricants (page4, lines 36-39), such as carbon black, silica based anhydrous salycilic acid calcium carbonate (which is named as a pigment used by Applicants), pigments , dyes or the like (page 7, lines 30, 31).

EP'498 further teaches that for an alkali soluble adhesive the polymer binder is combined with solvent wax, tackifier, and if 100 parts of a polymer is combined with 0-400 parts of solvent, 0-50 parts of wax, and 0-50 parts of tackifier as described on page 5, lines 56-58, then the amount of a binder as set forth in the instant claim 39 is clearly within the claimed range. Example 2-21 shows the production of a polymer, as pigment dispersing agent, which has weight average molecular weight 32,000, polydispersity 2.2, and acid value of 160mg/g. EP'498 utilizes titanium dioxide as a pigment (page 7, lines 4042), and when mixed with a pigment the recipe of a composition may contain 40-200 parts of coloring material, 0-100 parts of resin, etc, described on page 7, lines 33-36. **EP'498 teaches that when the composition is used as an alkali soluble protective film it is suitable as a protective film for agricultural use** (page 6, lines 37-43). The composition may contain 40-200 parts of pigment, 100 parts of resin, 30-100 parts of alkali, 125-250 parts of solvent (page 7, lines 38-45). For the alkali ammonia, triethylamine, ethanolamine, etc. are used (page 7, lines 44, 45). **With regard to the steps of the method, wherein the only steps are applying the composition and drying the composition, EP'498, teaches that the polyethylene plate having a clean surface was coated with acrylic polymer (reads on the step of applying the composition) and the temperature of 190°C was applied (drying the composition), thus also anticipating the steps of the process as instantly claimed (page 48, lines 15-17).** With regard to the newly introduced limitation that the coating is formed on the walls of greenhouse, it is noted that in the process claims the preamble is not given significant patentable weight unless the "claim drafter chooses to

use both preamble and the body to define the subject matter of the claimed invention", Allen Eng'g Corp.v. Bartell Indus., Inc., v. Darragh Co., 63 USPQ2d 1769, 1774 (Fed.Cir. 2002). On the other hand, this limitation in preamble is not accorded any patentable weight since it merely recites the purpose of a process or the intended use of a structure obtained by the process, and the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone, consult *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976).

8. Claims 46-48 stand rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0533 367 in view of EP 0478067.

EP'367 discloses a method for forming a protective coating from copolymer, formed from alpha, beta-unsaturated monomers, carboxylic acid monomers and amphiphilic monomers. The protective coating has an average molecular weight 7,000-25,000 and provides desired properties of rapid drying, substantial film strength and easy removal with alkaline solutions. (see abstract). The composition according to EP'367 contains additives, such as surfactants, UV absorbers, corrosion inhibitors, antioxidants, anti-foaming agents (page 2, lines 50-53). Among the monomers suitable for production of a polymer the monomers of the instant claim 46 are clearly named on page 3, lines 18-20. The coating composition was tested for its drying property , its resistance to acidic rain rust and for its removability with alkaline solution (page 4, lines 36-40). For this purpose the transparent plates were coated and dried, and after that the protective coating was removed from the plates (page 4, lines 39-58). Tables on

page 6 and 7 provide the characteristics of a composition, such molecular weight, glass transition temperature, acid value, with all these characteristics clearly within the claimed range. Also presented are drying properties and resistance to acid rain, which are superior for the obtained composition. EP'367 does not disclose the presence of a pigment in the composition. However, EP'367 provides a motivation to include a pigment, and in particular a pigment for making a composition for protective coating suitable for outside transparent walls, by stating that its protective coating shows a good resistance for acid rain and other weather related conditions, as discussed above. EP'067 discloses a protective coating and method of its forming having a binder polymer and a calcium carbonate pigment. Based on the similarity of the used binders, their intended uses, removability by alkaline solution, one skilled in the art would have found it obvious based on the suggestion of EP'367 to include a pigment of EP'067 into a binder composition of Ep'367 to impart the solar resistance properties to this composition along with already existing property of acid rain resistance.

Response to Arguments

8. Applicants' arguments filed November 25, 2003 have been fully considered but they are not persuasive.

Applicants argue that as a basis for rejection, the Office Action essentially employs the '498 reference, which is as an invitation to experiment with all vinyl polymers and to try an unlimited number of substitutions in order to arrive at the protective coating of the instant application. However, in order for a reference to

"reasonably suggest" a specific composition, the reference must indicate which parameters of experimentation are critical to success or provide an indication of the direction of likely success as opposed to leading a person skilled in the art to try each of numerous combinations, wherein Applicants rely on *In re O'Farrell*, 853 F.2d 498 (Fed. Cir. 1988). Applicants further argue that '498 fails to provide any "blazemark", which points the art to such commercially acceptable vinyl polymers as claimed in the instant application. *In re Rushig*, 379 F.2d 990, 994-95, 154 USPQ 1 18, 122 (CCPA 1967). The '498 description of use of a composition for a protective film for agricultural uses similarly teaches away from the instant claims, as the protective film is not for application to a substantially transparent surface of a greenhouse to protect against radiation. As EP'498 fails to disclose a number of the limitations described in the instant application, it can not serve as a basis for a rejection under 35 U.S.C. 102. *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQZd 1429, 1431 (Fed. Cir. 1997).

In response to this statement it is noted that not only the guidance is presented in EP'498, but the very identical polymer with very identical characteristics to those instantly claimed as shown above. Applicants' attention is respectfully drawn to abstract and especially anticipating is a preferred embodiment, which recites a polymer based on acrylic acid in a proportion from 50-100% by weight in its structure and having the acid value of 65 mg/g or higher, a number average molecular weight within the range of 1 ,000 - 50,000, a glass transition temperature of 30 C and a molecular weight distribution (polydispersity) of 3 or less. This is nothing else but clear anticipation of a

polymer per se with all its characteristics. Looking at the specific polymers with their expressly indicated characteristics, Applicants' statement that EP'498 is "an invitation to experiment with all vinyl polymers..." has absolutely no ground.

A reference anticipates a claim, if it discloses the claimed invention such that a skilled artisan could take this teaching in combination with his own knowledge of the particular art and be in possession of the invention, as per *In re Graves*, 36 USPQ 2d 1697 (Fed. Cir. 1995), or *In re Sasse*, 207 USPQ 107 (CCPA 1980). And furthermore, the disclosure in a reference must show the claimed elements arranged as in the claim, but need not be in identical words as used in the claim to be anticipatory. *In re Bond*, 15 USPQ 2d 1566 (Fed. Cir. 1990).

Applicants' arguments regarding rejection of claims 46-48 as being obvious over EP 367 in view of EP' 067 are not found persuasive.

Applicants argue that protective coating of EP 367 neither describes inclusion of a pigment in the protective coating nor the application of the protective coating on a transparent surface. In response to this it is noted that had the reference EP'367 disclosed the application of a composition on a transparent substrate the claims directed to a method would have been rejected under 35 USC 102, but not 103. With regard to the limitation that the coating is formed on the walls of greenhouse, it is noted that in the process claims the preamble is not given significant patentable weight unless the "claim drafter chooses to use both preamble and the body to define the subject matter of the claimed invention", *Allen Eng'g Corp.v. Bartell Indus., Inc., v.*

Darragh Co., 63 USPQ2d 1769, 1774 (Fed.Cir. 2002). On the other hand, this limitation in preamble is not accorded any patentable weight since it merely recites the purpose of a process or the intended use of a structure obtained by the process, and the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976). Therefore, the reference to EP'067 was in no way applied as to remedy the lack of limitation referred to an intended use of a process, but to show how the pigment of composition used in EP'067 is operable in the process of EP'367. In fact, the compositions of EP'367 and EP'067 are similar to each other, they are both alkali removable and are both used to make protective coating by essentially the same conventional process recited in the instant claims, therefore, in response to applicants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the instant case the motivation to combine references comes from "three sources: the nature of the problem to be solved, the teaching of the prior art and the knowledge of persons of ordinary skill in the art", as per *In re Rouffet*, 149 F3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (703) 305-0400. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (703) 308-4333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 2450.

M. KORNAKOV

Michael Kornakov
Examiner
Art Unit 1746